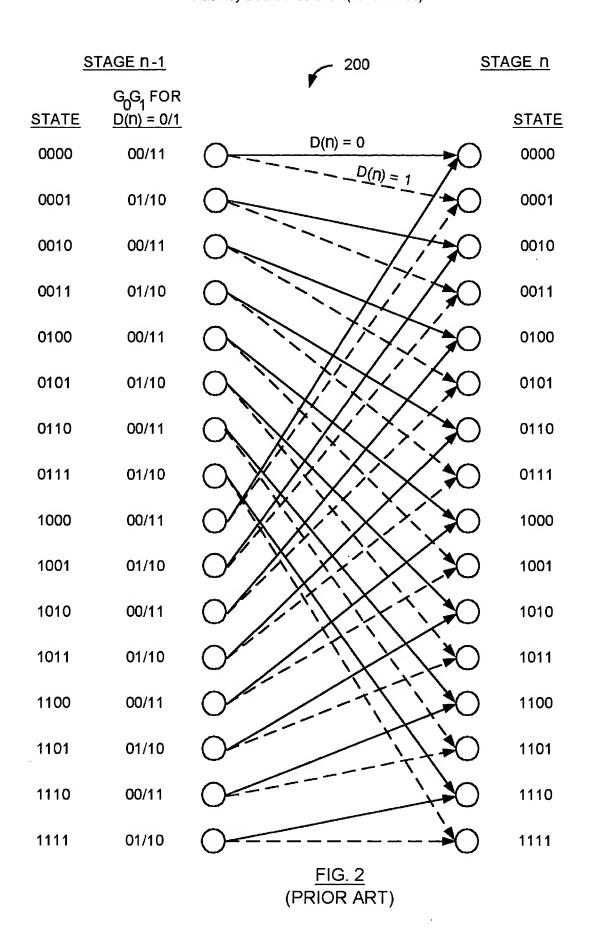


FIG. 1 (PRIOR ART)



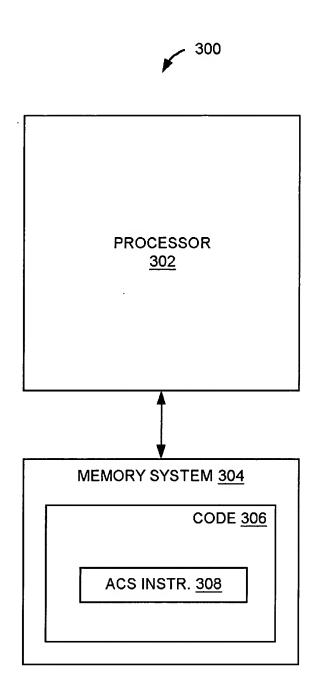
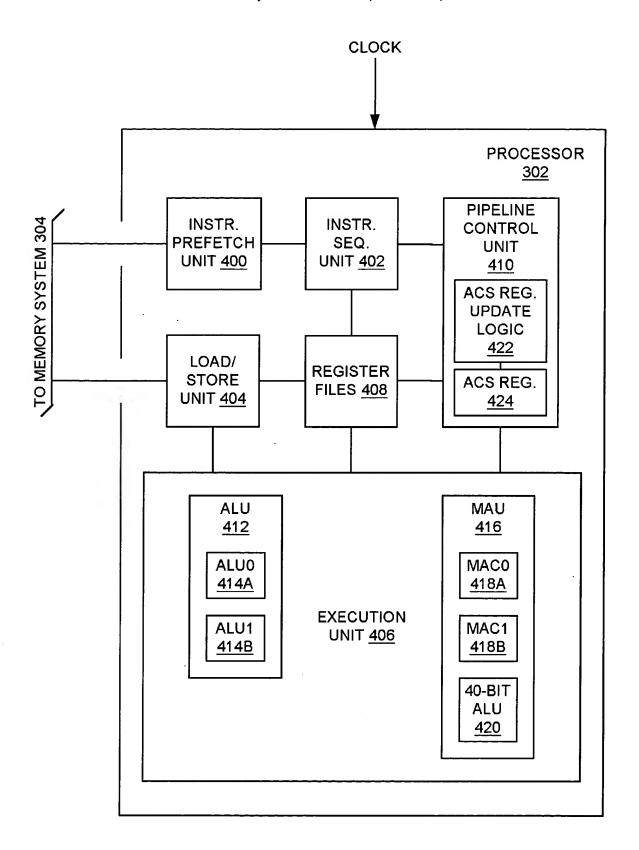


FIG. 3



Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)

CLOCK											
	FD	GR	RD	AG	MO	M1	EX	WB			
		FD	GR	RD	AG	M0	M1	EX	WB		
			FD	GR	RD	AG	МО	M1	EX	WB	

<u>FIG. 5</u>

Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)

308 **DESTINATION** SOURCE SOURCE OPCODE REGISTER REG. 1 REG. 2 FIELD <u>600</u> FIELD <u>602</u> FIELD <u>604</u> FIELD <u>606</u>

		FIG. 6A			
REGISTER:					
R0	XXXX				
{R5, R4}	0X1123	0X0030			
{R7, R6}	0X000A	0X0008			
VITR	0X0000000				
		<u>FIG. 6B</u>			
REGISTER:					
R0	0X0038				
{R5, R4}	0X1123	0X0030			
{R7, R6}	0X000A	0X0008			
VITR	0X000	0X0000001			

FIG. 6C

Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)

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OPCODE FIELD 700	DESTINATION REGISTER FIELD 702	SOURCE REG. 1 FIELD 704	SOURCE REG. 2 FIELD 706
		11ELD 104	100 100

FIG. 7A

REGISTER:

R1 XXXX

{R5, R4} 0X8000 0XFF30

{R7, R6} 0X000A 0XFF00

VITR 0X0000001

FIG. 7B

REGISTER:

R1 0X7F00

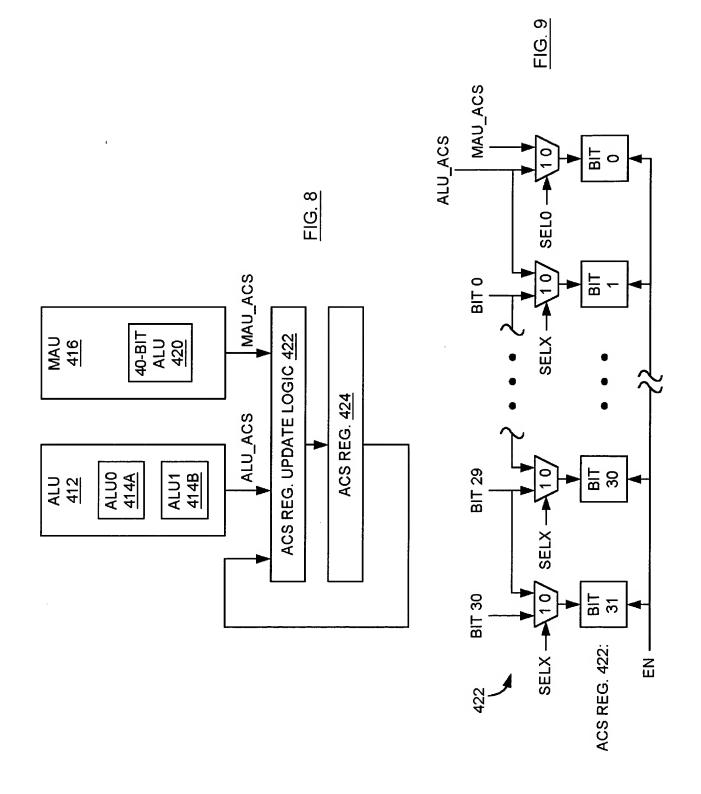
{R5, R4} 0X8000 0XFF30

{R7, R6} 0X000A 0XFF00

VITR 0X0000002

FIG. 7C

Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)



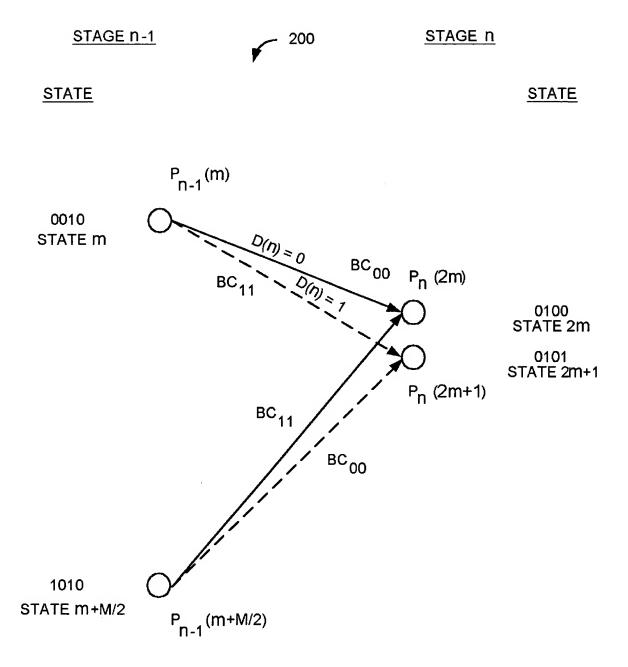


FIG. 10

Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)

1100

GENERATE COMPUTER PROGRAM CODE FOR A PROCESSOR **INCLUDING TWO OR MORE** ADD-COMPARE-SELECT (ACS) INSTRUCTIONS, WHEREIN STORAGE ELEMENTS SPECIFIED BY THE ACS INSTRUCTIONS ARE SELECTED SUCH THAT THE PROCESSOR WILL SIMULTANEOUSLY EXECUTE THE ACS INSTRUCTIONS. AND THE COMPUTER PROGRAM CODE, WHEN EXECUTED BY THE PROCESSOR. CAUSES THE PROCESSOR TO: (I) RECEIVE SYMBOLS OF THE CONVOLUTIONAL CODE IN SEQUENCE, (II) USE THE RECEIVED SYMBOLS TO BUILD A DATA STRUCTURE COMPRISING DATA INDICATIVE OF MOST LIKELY TRANSITIONS BETWEEN NODES OF A TRELLIS DIAGRAM AND ASSOCIATED INPUT VALUES, AND (III) USE THE DATA STRUCTURE TO PRODUCE THE INPUT VALUES CORRESPONDING TO THE RECEIVED SYMBOLS OF THE CONVOLUTIONAL CODE

1102

INITIATE EXECUTION
OF THE COMPUTER PROGRAM CODE
BY THE PROCESSOR

1104

Processor and Method For Convolutional Decoding Inventor(s): Danny W. Wilson, et al Attorney Docket: 03-0157 (4028-03100)

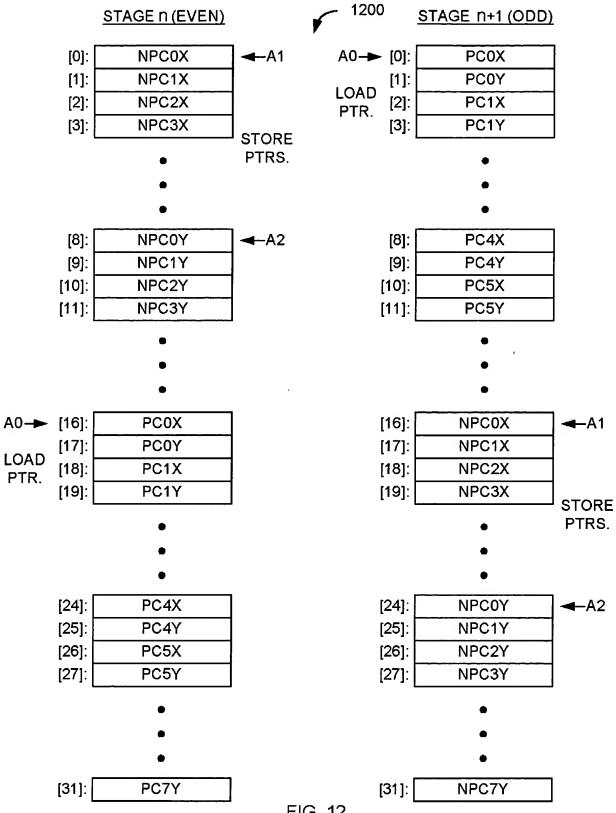


FIG. 12